

Notice of Allowability

Application No.

10/717,769

Examiner

Quang N. Nguyen

Applicant(s)

DORENBOSCH ET AL.

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 10/17/2006.
2. ☒ The allowed claim(s) is/are 1,3-9 and 11-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's Amendment was given in a telephone interview with the Applicant's Representative, Mr. Simon B. Anolick (Reg. No. 37,585), on November 30th, 2006.

3. Please amend claims 1, 9 and 17 and cancel claims 2 and 10 as below:

Claim 1. (Currently Amended) A method of facilitating communications at a proxy in a network comprising:

receiving a message from a mobile unit having a contact address;

establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address;

intercepting and identifying at the proxy at least one signaling message **from a server directed to** [for] the mobile unit that includes the contact address for a session directed to the mobile unit;

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compressing the at least one signaling message that includes the contact address;

routing the compressed at least one signaling message to the mobile unit with the contact address;

intercepting and identifying at the proxy at least one later signaling message from the server directed to the mobile unit, wherein the intercepting and identifying at the proxy the at least one later signaling message further comprises identifying the at least one later signaling message for the session directed to the mobile unit using the contact alias;

determining whether there is a need to route a message corresponding to the at least one later signaling message to the mobile unit;

when it is determined that there is the need to route the message corresponding to the at least one later signaling message to the mobile unit:

compressing the at least one later signaling message ~~[to the mobile unit]~~,
and

routing the compressed at least one later signaling message to the mobile unit; and

when it is determined that there is not the need to route the message corresponding to the at least one later signaling message to the mobile unit:

not routing ~~[[a]]~~ the ~~second~~ message corresponding to the at least one later signaling message to the mobile unit, and

responding to the at least one later signaling message.

Claim 2. (Canceled)

Claim 9. (Currently Amended) A method for compressing communications at a proxy for SIP message compression, the method comprising:

receiving a message with a contact address from a mobile unit having the contact address;

establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address;

intercepting and identifying at the proxy at least one SIP message from a server that includes the contact address, the at least one SIP message directed to the mobile unit, wherein the intercepting and identifying the at least one SIP message from the server that includes the contact address comprises intercepting the at least one SIP message using the contact alias;

compressing the at least one SIP message that includes the contact address at the proxy to obtain at least one corresponding compressed message;

routing the at least one corresponding compressed message to the mobile unit;

intercepting and identifying at the proxy at least one later SIP message from the server, the at least one later SIP message directed to the mobile unit;

determining that there is ~~not~~ a need to route a message corresponding to the at least one later SIP message to the mobile unit;

when determining that there is not the [nə] need to route the message corresponding to the at least one later SIP message to the mobile unit:

generating a SIP response message for the at least one later SIP message, and

sending the SIP response message to the server; and

when determining that there is the need to route the message corresponding to the at least one later SIP message to the mobile unit:

compressing the at least one later SIP message to obtain at least one later corresponding compressed message, and

routing the at least one later corresponding compressed message to the mobile unit.

Claim 10. (Canceled)

Claim 17. (Currently Amended) A device for facilitating communications in a network with a mobile unit having a contact address comprising:

a SIP register storing a first SIP message, the first SIP message identifiable as being destined for the contact address of the mobile unit; and

a controller coupled to the SIP register and having an output, the controller compressing the first SIP message in the SIP register and placing the compressed first SIP message on the output for transmitting the compressed first SIP message to the mobile unit wherein the controller being programmed for:

receiving a second SIP message in the SIP register,
determining whether there is a need to send a message to the mobile unit
corresponding to the second SIP message,

for when there is [a] not the need to send [[a]] the message to the
mobile unit corresponding to the second SIP message, generating a SIP
response message to the second SIP message on behalf of the mobile unit and
placing the SIP response message on the output for transmitting the compressed
message SIP response message to the server, and

for when there is [[a]] the need to send the message to the mobile unit
corresponding to the second SIP message, compressing the second SIP
message in the SIP register and placing the compressed second SIP message
on the output for transmitting the compressed second SIP message to the mobile
unit.

4. Pursuant to MPEP 606.01, the title has been changed to read:

-- METHOD AND SYSTEM FOR TRANSMITTING COMPRESSED MESSAGES
AT A PROXY TO A MOBILE DEVICE IN A NETWORK --

5. Claims 1, 3-9 and 11-22 are allowed.

6. The following is an examiner's statement of reasons for allowance:

In interpreting the new amended claims, in light of the specification and the applicant's arguments filed on 10/17/2006, the Examiner finds the claimed invention to be patentably distinct from the prior art of records.

Majumdar et al. (US 2003/0120813 A1) discloses an apparatus and method for generating compressed SIP messages from full sized SIP messages and vice versa (*compressing the at least one signaling message that includes the contact address*) in order to decrease call set up time in an IP based communication system, wherein the SIP agent 108 compresses the full Response and sends the compressed Response to the Proxy 112a (*as illustrated in Fig. 8*) for eventual transmission to the Mobile Station 102 via the Base Transceiver Station 104 (*routing the compressed at least one signaling message corresponding to the mobile unit with the contact address*) (**Majumdar, Fig. 8 and paragraph [0032]**).

Ekberg (US 7,003,282) discloses a system and method for authentication in a mobile communication system, wherein a security server transmits to the proxy server a SEC_INFO_REQ authentication request message, which contains a session identifier and the IMSI subscriber identifier. In response to this authentication request message, the proxy server transmits to then authentication center "AuC" an inquiry message, in accordance with the MAP protocol, to obtain a normal authentication triplet and relays the triplet further to the security server in a SEC_INFO_RSP message on behalf of the subscriber (*generating a response message in response to receiving the at least one*

later message; and sending the response message to a server) (Ekberg, col. 6, lines 33-46).

Haddad (US 2004/0215766 A1) teaches a method and apparatus for creating a network connection to a network, wherein the server 100 periodically transmits a SIP signal to advertise its presence to the computing device 102 as an invitation to close-by computing devices to connect to the network it advertises (i.e., advertising the presence of a proxy for signaling message compression to the mobile device) (Haddad, paragraphs [0057-0058]).

However, the prior art of records fail to teach or suggest individually or in combination that a computer system and method of facilitating communications at a proxy in a network comprising: receiving a message from a mobile unit having a contact address; establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address; intercepting and identifying at the proxy at least one signaling message from a server directed to the mobile unit that includes the contact address for a session directed to the mobile unit; compressing the at least one signaling message that includes the contact address; routing the compressed at least one signaling message to the mobile unit with the contact address; intercepting and identifying at the proxy at least one later signaling message from the server directed to the mobile unit, wherein the intercepting and identifying at the proxy the at least one later signaling message further comprises identifying the at least one later signaling message for the session directed to the mobile unit using the contact alias; determining whether

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there is a need to route a message corresponding to the at least one later signaling message to the mobile unit; when it is determined that there is the need to route the message corresponding to the at least one later signaling message to the mobile unit: compressing the at least one later signaling message, and routing the compressed at least one later signaling message to the mobile unit; and when it is determined that there is not the need to route the message corresponding to the at least one later signaling message to the mobile unit: not routing the message corresponding to the at least one later signaling message to the mobile unit, and responding to the at least one later signaling message as set forth in independent claims 1 and 9. Claims 1, 3-9 and 11-22 are allowed because of the combination of other limitations and the limitations listed above.

The examiner finds the Applicant's arguments on pages 8-10 of the Remarks filed on 10/17/2006 to be persuasive. The Applicant argued in substance that the combination of prior art of records fail to disclose the features of the invention including determining whether there is a need to route a message corresponding to the at least one later signaling message to the mobile unit; when it is determined that there is the need to route the message corresponding to the at least one later signaling message to the mobile unit: compressing the at least one later signaling message, and routing the compressed at least one later signaling message to the mobile unit; and when it is determined that there is not the need to route the message corresponding to the at least one later signaling message to the mobile unit: not routing the message corresponding to the at least one later signaling message to the mobile unit, and responding to the at

least one later signaling message, as claimed in the invention to allow the proxy to determine whether there is a need to route a message corresponding to the at least one later signaling message to the mobile device and based on the outcome of the determination, either a compressed message corresponding to the at least one later signaling message is generated and sent to the mobile device or a response is generated and sent to the peer or the server (**see Remarks filed on 10/17/2006, pages 8-9**), hence, to reduce wireless network congestion and increase the speed of information transmission (**see Specification, paragraphs [0066] and [0072]**).

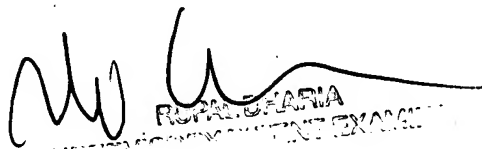
7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should clearly labeled "Comments on Examiner's Amendment".

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
PATENT EXAMINER